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The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/723,846
Filing Date: November 26, 2003
Appellant(s): FOOTE ET AL.

Foote et. al.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/25/07 appealing from the Office action mailed 1/24/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,150,836	Walker	4-1979
5,115,550	Williamson	5-1992

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Walker (US. 4,150,836).

Walker discloses a seal configuration comprising a body (16) that contains internal pressure (pressure in body 16), the body having an opening with inwardly tapered peripheral sidewalls (tapered wall where seal 24 contacts), a closure (closure having wall 20) that closes the opening, the closure serving as a door (closure serves as a door) adapted to be opened and closed at will, the closure having an attachment portion larger than the opening (this is the case since the opening is closed by the closure) with a planar surface (planar surface 20) from which projects an axially projecting stopper portion **(stopper portion that is contacted by ring surface 40 and having the groove to retain the seal)** that fits closely within the opening, the stopper portion having an endless peripheral seal groove (groove that retains the seal 24 and 42) extending in spaced relation around the axis in which is positioned a peripheral seal (24) that sealingly engages the tapered peripheral sidewalls of the body in interference fit relation, thereby conforming to the tapered peripheral side wall, a backing ring (42) of pliable memory retaining material sheltered from internal pressure within the body (this is the case since the seal blocks the pressure) by the peripheral seal and positioned in close fitting relation around the projecting stopper portion (this is the case since the backup ring is positioned in close fitting relation with **the stopper portion**) between the peripheral seal groove and the planar surface (20) of the attachment portion of the closure, the backing ring engaging the tapered peripheral sidewall of the body in interference fit relation and conforming to the tapered peripheral sidewall while

being sufficiently stiff as to resist extrusion flow under pressure (this is the case as seen in figures), *such that when the peripheral seal deforms (intended use but as seen in figure 4 the seal deforms) in response to an increase in internal pressure within the body and extrusion gaps begin to form between the attachment portion of the closure and the body (intended use, but the pressure that flow between the member 16 and 14 will also deform the seal), the peripheral seal is extruded in an axial direction (the seal extends both axially and radially when the seal deforms) against the backing ring (the seal is extruded against the backing ring 42, the limitations above are considered as intended use limitations or method limitations and given little patentable weight in apparatus claim)*, that portion of the backing ring engaging the tapered peripheral side wall of the body plastically deforming by changing shape (the backing ring 42 changes shape) and applying sealing pressure (method limitation given no patentable weight in an apparatus claim, but the backing ring provides a secondary seal) at the extrusion gap to prevent the peripheral seal from entering the extrusion gaps (as demonstrated in figures 3a-3b and 4).

As stated applicant has described limitations that are intended use limitations and are given little patentable weight in an apparatus claim.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Williamson (Us. 5,115,550).

Williamson discloses a seal configuration comprising a body (76) that contains internal pressure (pressure in body 76), the body having an opening with inwardly tapered peripheral sidewalls (tapered wall 68), a closure (46) that closes the opening, the closure serving as a door (closure serves as a door) adapted to be opened and closed at will, the closure having an

attachment portion larger than the opening (this is the case since the opening is closed by the closure portion 40) with a planar surface (planar surface of 46 that faces 44) from which projects an axially projecting stopper portion (stopper portion that is contacted by 56 of ring 44) that fits closely within the opening, the stopper portion having an endless peripheral seal groove (groove that retains the seal 72) extending in spaced relation around the axis in which is positioned a peripheral seal (72) that sealingly engages the tapered peripheral sidewalls of the body in interference fit relation, thereby conforming to the tapered peripheral side wall, a backing ring (44) of pliable memory retaining material sheltered from internal pressure within the body (this is the case since the seal blocks the pressure) by the peripheral seal and positioned in close fitting relation around the projecting stopper portion (this is the case since the backup ring is positioned in close fitting relation with the stopper portion) between the peripheral seal groove and the planar surface (the planar surface of 46) of the attachment portion of the closure, the backing ring engaging the tapered peripheral sidewall of the body (backing ring portion 62) in interference fit relation and conforming to the tapered peripheral sidewall while being sufficiently stiff as to resist extrusion flow under pressure (this is the case as seen in figures), *such that when the peripheral seal deforms (intended use but as seen in figure 4 the seal deforms) in response to an increase in internal pressure within the body and extrusion gaps begin to form between the attachment portion of the closure and the body (intended use, but the pressure that flow between the member 76 and 46 will also deform the seal), the peripheral seal is extruded in an axial direction (the seal extends both axially and radially when the seal deforms) against the backing ring (the seal is extruded against the backing ring, the limitations above are considered as intended use limitations or method limitations and given little*

patentable weight in apparatus claim), that portion of the backing ring engaging the tapered peripheral side wall of the body plastically deforming by changing shape (the backing ring 44 changes shape) and applying sealing pressure (method limitation given no patentable weight in an apparatus claim, but the backing ring provides a secondary seal) at the extrusion gap to prevent the peripheral seal from entering the extrusion gaps (as demonstrated in figures 3-5). As stated applicant has described limitations that are intended use limitations and are given little patentable weight in an apparatus claim.

(10) Response to Argument

Appellant's arguments filed 6/25/07 have been fully considered but they are not persuasive.

Response to Appellants' arguments to Walker:

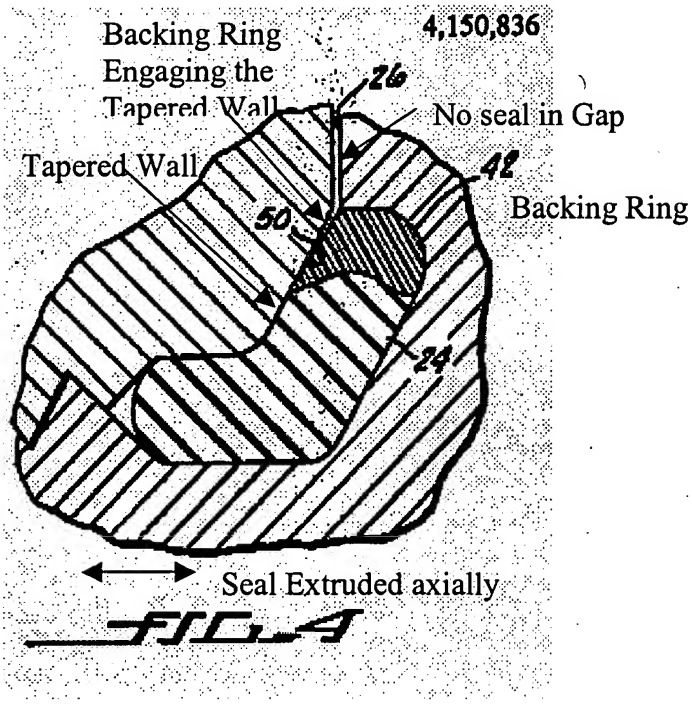
Appellants' argument that Walker fails to disclose a planer surface from which projects an axially projecting stopper portion that fits closely within the opening, the stopper portion having an endless peripheral seal groove extending in spaced relation around the axis in which is positioned a peripheral seal is not persuasive because Walker teaches a planar surface 20 from which projects an axially projecting stopper portion (portion having the groove to retain the seal 24 and surface that is contacted by ring surface 40) that fits closely within the opening (the stopper portion having the groove fits with in an opening in 16 that receives the stopper portion), the stopper having an endless peripheral seal groove (groove that receives 24 and 42) extending in spaced relation around the axis in which is positioned a peripheral seal (24).

Appellants' argument that Walker fails to disclose a backing ring that is positioned in close fitting relation around the stopper portion between the peripheral groove and the planar

surface of the attachment portion of the closure is not persuasive because Walker teaches that a backing ring (42) is positioned in close fitting relation around the stopper portion (the backing ring having a lip 54 that contacts the stopper portion having wall surface 34, which makes the backing ring in close fitting relation around the stopper portion) between the peripheral groove (the groove having seal ring 24) and the planar surface (planar surface 20) of the attachment portion (portion adjacent to 20) of the closure (10).

Appellants' argument that Walker fails to teach that the peripheral seal is extruded in an axial direction is not persuasive because as shown in figure 4, the peripheral seal 24 is extruded in the axial direction.

Appellants' argument that Walker fails to teach limitations of claim 1 is not persuasive because Walker teaches all the structural limitations of claim 1, **see attached figures 2, 3B and 4 below**, which shown a body, closure, attachment portion, planar surface, opening in the body, stopper portion, seal groove, gap, seal extruding in an axial direction, backing ring between the planar surface and the seal groove and backing ring in contact with the stopper portion.



4,150,836

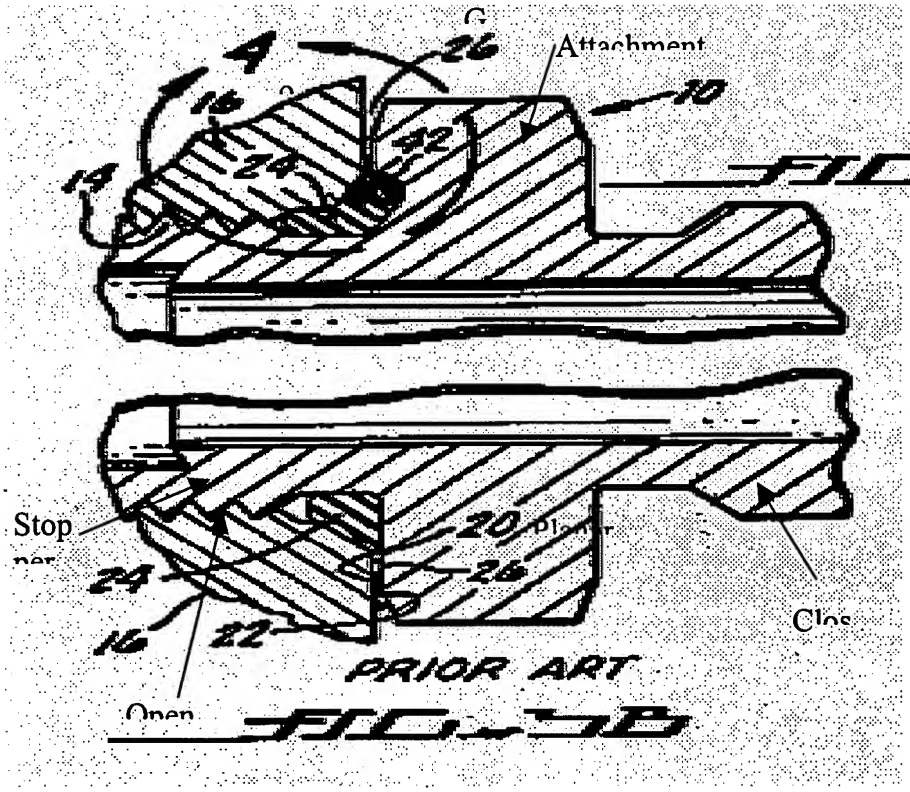
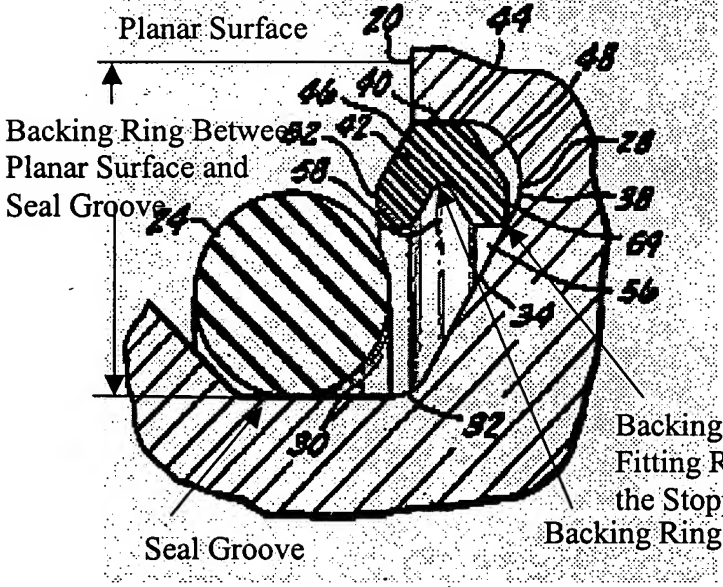


FIG. 3A

FIG. 3B

4,150,836

FIG. 2



Response to Appellants' arguments to Williamson:

Appellants' argument that Williamson fails to teach a backing ring of pliable memory retaining material is not persuasive because the backing ring 44 is made of a pliable memory retaining material, since the portion 58 is deformable.

Appellants' argument that Williamson fails to teach that the backing ring is positioned in close fitting relation around the projecting stopper portion is not persuasive because Williamson teaches that the backing ring 44 having 56 that contacts an outer portion of the stopper portion.

Appellants' argument that Williamson fails to teach that the peripheral seal is extruded against the backing ring, that portion of the backing ring engaging the tapered peripheral sidewall of the body plastically deforming by changing shape and applying sealing pressure at the extrusion gaps is not persuasive because Williamson teaches that the peripheral seal 72 is extruded axially and the backing ring having a portion 68 that is deformed by contacting the tapered peripheral wall of the body 36. Furthermore the backing ring 44 prevents extrusion of the seal ring 72 by applying pressure at the gap to be sealed.

Appellants' argument that Williamson fails to disclose the limitations of claim 1 is not persuasive because Williamson discloses each and every limitations of the claims, **see attached figure 5 below**, which shown a body, closure, attachment portion, planar surface, opening in the body, stopper portion, seal groove, gap, seal extruding in an axial direction, backing ring between the planar surface and the seal groove and backing ring in contact with the stopper portion.

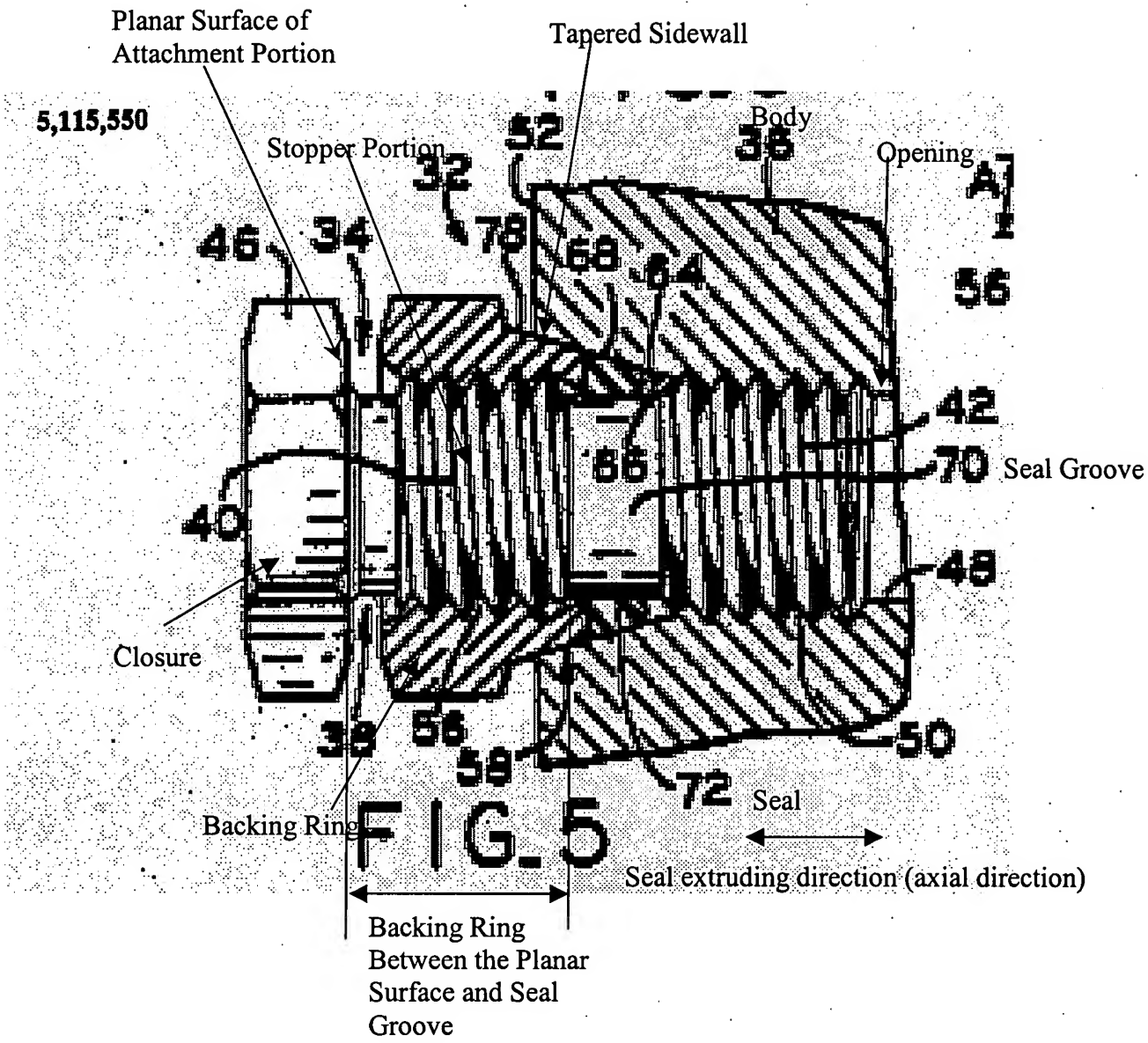


FIG. 5

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Vishal Patel

Conferees:

Vishal Patel, VP

Patricia Engle, PJE

Meredith Petravick MP